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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/645,742 | 08/21/2003 | Paul A. Ganfield | ROC920030018US1 | 9125 |
| 30206 | 7590 | 11/21/2005 | | |
| IBM CORPORATION ROCHESTER IP LAW DEPT. 917 3605 HIGHWAY 52 NORTH ROCHESTER, MN 55901-7829 | | | EXAMINER ELLIS, KEVIN L | |
| | | | ART UNIT 2188 | PAPER NUMBER |

DATE MAILED: 11/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/645,742 | Applicant(s) GANFIELD ET AL. | |
| | Examiner Kevin L. Ellis | Art Unit 2188 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>8/21/03</u> . | 6) <input type="checkbox"/> Other: ____. |

Detailed Action

1. Claims 1-30 are presented for examination.
2. Information disclosed and listed on PTO 1449 has been considered.

Claim Rejections – 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1-7, 9, 10, 12-16, and 18 are rejected under 35 U.S.C. § 102(b) as being anticipated by Stamm et al., U.S. Patent 5,404,482.

A) As to claims 1, 3, 4, 13, and 18, Stamm et al. discloses the invention as claimed.

Stamm et al. teaches memory locks that delay the updating of data from a "software access" (see Abstract). The memory locks of Stamm store address information (i.e. a "pointer) for the memory block that is locked (see Col 3 Lines 30-46). A processor (hardware) can lock a block of memory to modify the data stored there. While the block is locked the system will delay any other access to that block of memory (see Col 3 Line 30 to Col 4 Line 21). Subsequent software reads or writes to that block of memory will

be delayed (see Col 3 Lines 39-53). The "control structure" of the claim can be read on the data stored in the memory or the data stored in the cache memory, it is a very generic term as presently claimed.

- B) As to claim 2, the locks are released once the update is finished (see Col 3 Lines 54-57).
- C) As to claim 5, the "pointer" does represent a portion of an address to the control structure (i.e. memory block).
- D) As to claims 6-7, the "update list" (i.e. locks) are stored in hardware, they are stored in a CAM, which has a plurality of entries (see Col 3 Lines 30-38).
- E) As to claims 9, 10, and 12, the "control structure" can be any data, Stamm et al. does not limit the type of data that can be locked.
- F) As to claims 14-16, the software access that is delayed would be received over a bus with control and address signals (see Col 3 Lines 30-53).

Claim Rejections – 35 USC § 103

5. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 11, 17, and 19-30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Stamm et al., U.S. Patent 5,404,482.

- A) As to claims 11, 17, 19, 24, and 27-30, Stamm et al. discloses the invention substantially as claimed. However, Stamm et al. does not disclose that the locking mechanism is used in a network processor system. The locking mechanism taught by Stamm et al. could be utilized by any system to prevent multiple accessors (hardware or software) from accessing the same data at the same time and causing a coherency problem. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the locking mechanism of Stamm et al. with a network processor for preventing a software access to a control structure while a hardware update of that control structure is taking place in order to prevent a data coherency problem.
- B) As to claims 20 and 25, these limitations have been addressed with respect to claim 2 above and are rejected similarly.
- C) As to claims 21-23 and 26, these limitations have been addressed with respect to claims 14-16 above and are rejected similarly.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin L. Ellis whose telephone number is 571-272-4205. The examiner can normally be reached on weekdays from 6:00AM-2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on 571-272-4210. The fax phone numbers for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2188

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Kevin L. Ellis
Primary Examiner
November 17, 2005

Kevin L. Ellis